May 2023
900516-001
Rev 06

TouchTunes

FRU Installation Guide
Replacing Virtuo Jukebox Monitor

Purpose

This document explains how to install the Virtuo Monitor Field Replacement Unit (FRU) (P/N 600141-xxx) in Virtuo and Virtuo II jukeboxes.

NOTE	For the remainder of this document, the name Virtuo refers to both Virtuo and Virtuo II jukeboxes, as this FRU kit is compatible with both jukebox models.

Audience

- TouchTunes Virtuo and Virtuo II jukebox operators and technicians
- TouchTunes Field Service and Customer Support
- TouchTunes Sales personnel

This document includes tasks of the following type:

☐	Software
☑	Hardware
☐	Electrical

Estimated Time

20 minutes

Required Personnel

1 technician

Topics

- Required Tools and Equipment
- Important Safety Information
- Removal
- Replacement
- Contacting Technical Support

Required Tools and Equipment

To perform this installation, the following tools and equipment are required:

- Torque-limiting nut driver and metric (4mm) socket. Do not use a standard ratchet, which can lead to over-torquing. *A regular nut driver (with 4mm socket) can be used, as long as you are careful to avoid over-torquing when tightening the nuts.*
- Cable ties for cable dressing

- Cutting tool

Important Safety Information

WARNING: When performing this procedure or any other maintenance on your jukebox, the jukebox **must** be powered off and its electrical power disconnected.

IMPORTANT: A properly-grounded anti-static wrist band should be worn at all times during the procedure presented in this document.

Removal

1 Press the **MNGR** button on the I/O Board to open the Operator interface main menu.

2 On the Virtuo screen, press the **REBOOT** button.

3 When you hear the BIOS beep, power down Virtuo by setting the rocker switch on the power strip to the off (O) position.

WARNING: Never shut down or unplug Virtuo without first performing a reboot and waiting for the BIOS beep. Doing so can cause damage to the hard drive and make it unusable.

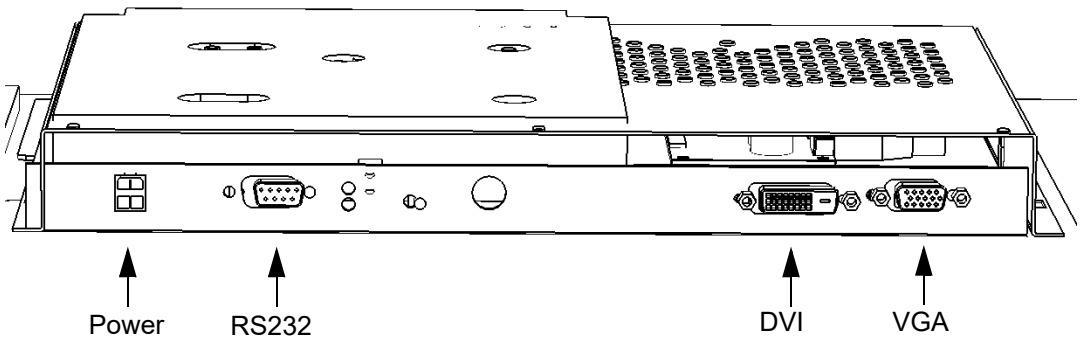
4 Unplug the AC power cable from the wall socket.

Included in This Kit

Ensure that you have received all the required parts before proceeding with this installation.

Part	Quantity	TouchTunes Part #
MON, TOUCHSCREEN, 27"	1	300955-xxx
FAS, KNUT, M4, ZN	10	200087-001
MAN, FRU, MONITOR (this document)	1	901516-001

1 All connectors are located on the monitor's bottom panel, as shown in the following figure. Disconnect all connectors from the bottom panel.



Bottom view of monitor

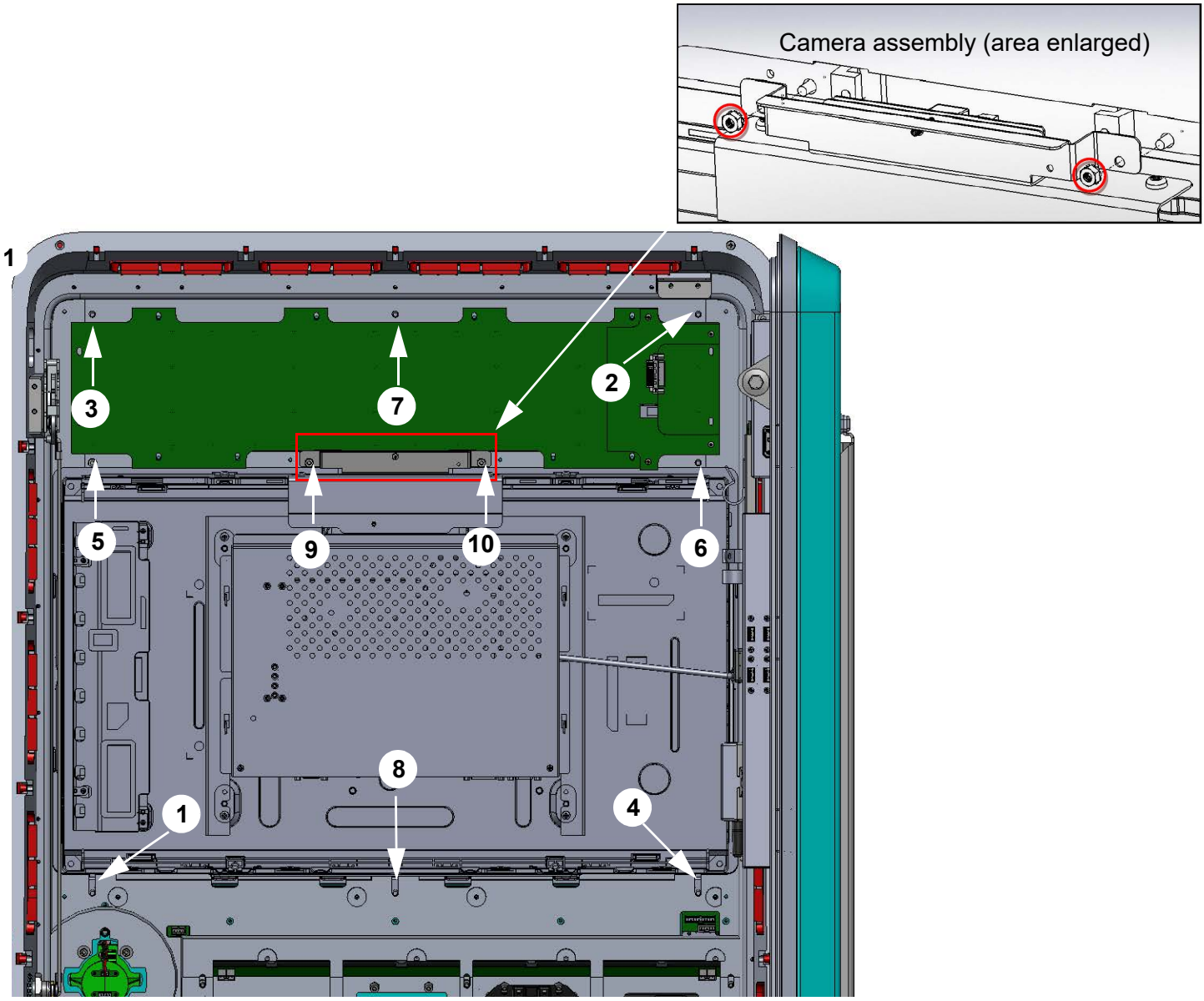
Note: Images are for illustration purposed only and your monitor may be slightly different.

2 The touch screen is secured to the inside of the door with (10x) nuts fastened to studs on the rear of the unit, and is removed by lifting it away from the exterior of Virtuo.

3 Mark the level where the camera is currently installed. This should be done to ensure that the camera will be at the same level when you re-install it later in this procedure.

4 Loosen the brandbar's screws (as shown with red ellipses in the figure below).

5 Using a nut driver, remove the camera assembly from the rear of the monitor.

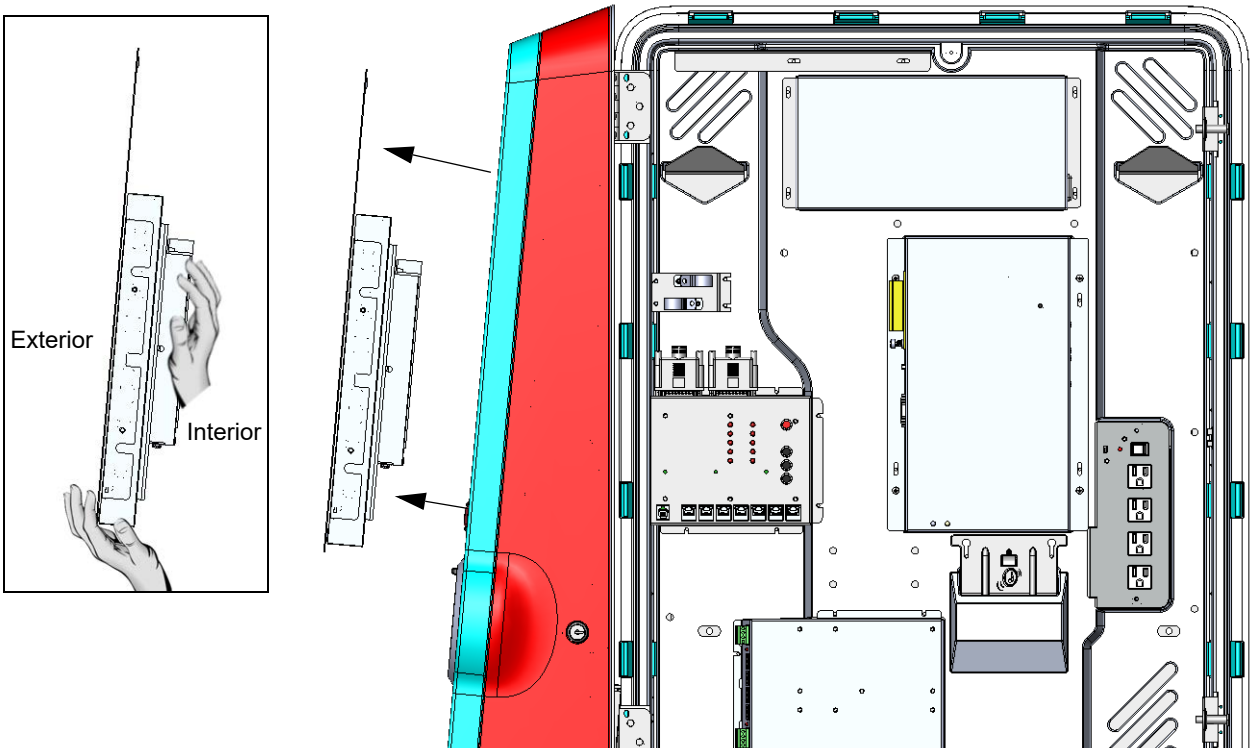


Mounting Nut Locations, Tightening Sequence, and Detail of Camera Assembly

6 Disconnect the camera’s USB cable from its port on the Virtuo computer, and set the camera aside for installation on the new monitor.

7 Remove the remaining 8 nuts from their studs and set them aside.

8 With one hand positioned on the rear of the monitor and the other supporting its front on the exterior, gently push the unit forward and lift it away from the Virtuo.

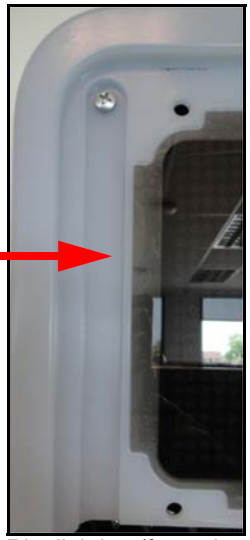


Remove monitor from jukebox

⚠ IMPORTANT PREPARATION STEP: (applies to 600141-001 and 600141-002 only)

Along the upper right edge of the monitor (as viewed from the rear) is a sensor wire fastened to the glass with a light adhesive.This wire will fit into a channel in the RIM lighting when the monitor is installed.

Monitor (rear view) showing sensor wire

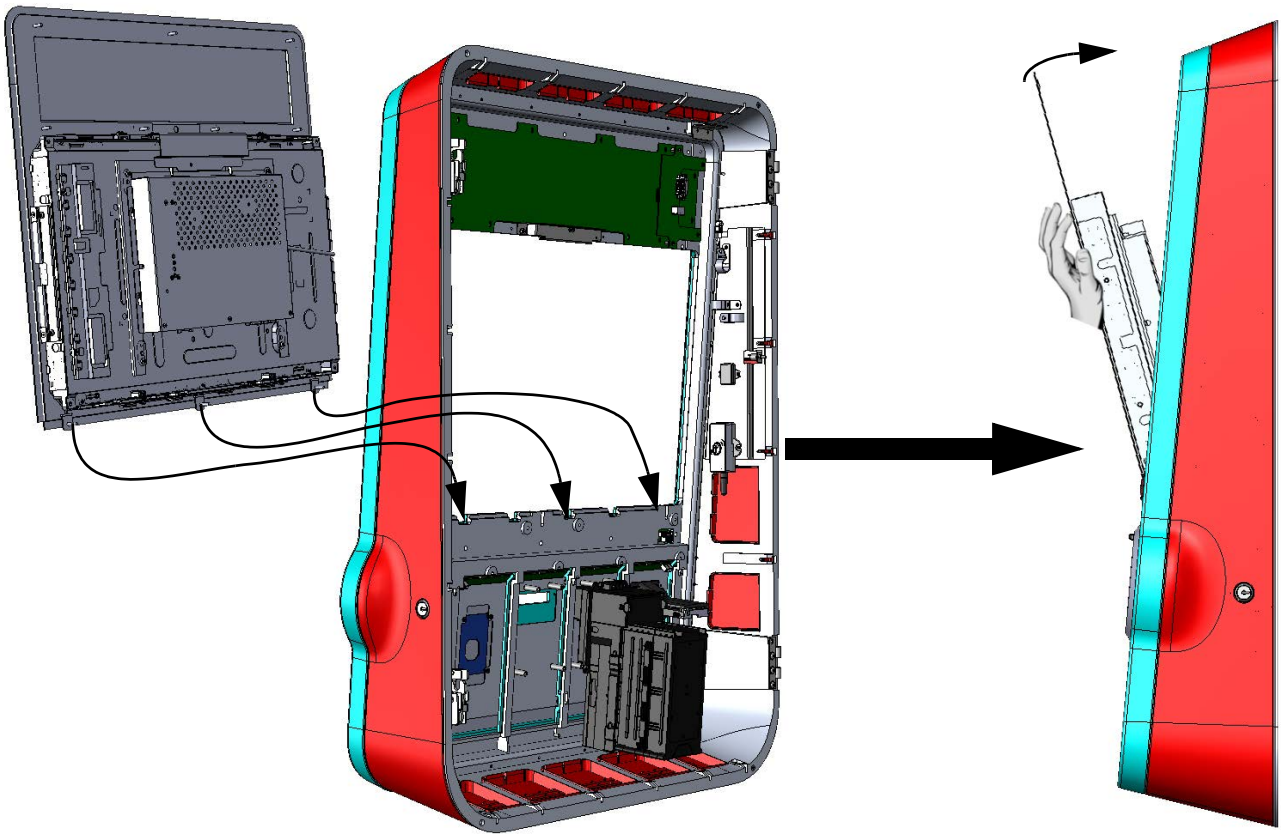


Rim lighting (front view) showing channel

Before proceeding with installation, verify that the wire is straight and has little or no lateral play. If the wire is not sitting within the channel in the Rim lighting—but is sandwiched between the glass and a non-recessed surface—you risk damaging the glass when torquing down the mounting nuts.

Replacement

1 Angle the new monitor into position such that its 3 lower studs are seated in their tabs on Virtuo's door. Doing so will provide support for the monitor while you maneuver it into its final position.



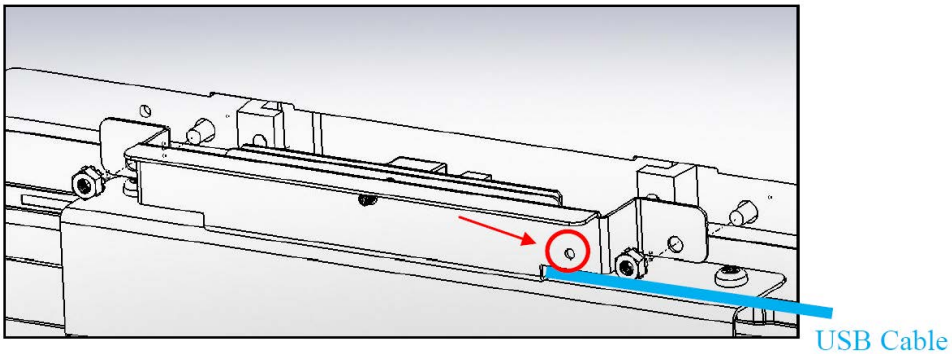
Angle the monitor into the jukebox

2 Press firmly on the face of the monitor until it is properly seated and makes flush contact with the door.

CAUTION: When performing the following steps, use the proper tool (torque-limiting nut driver) and **DO NOT OVERTIGHTEN** the nuts. Doing so may cause damage to the LCD touch screen. TouchTunes is **NOT** responsible for equipment damage caused by improper installation.

3 Fasten all nuts (finger-tight) to theirs studs except the two nuts for mounting the Virtuo camera.

4 Fasten the camera assembly to the monitor with the two remaining nuts and ensure that the USB cable is routed toward the right.



Install camera assembly

5 Reconnect the camera's USB cable to its port on the Virtuo computer, and dress the cables using cable ties.

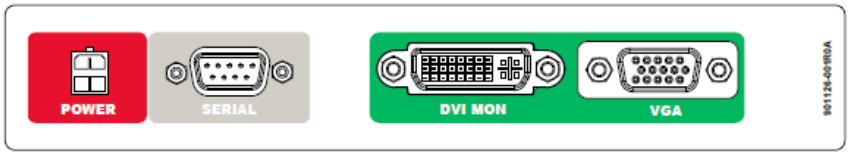
6 Torque all ten nuts to 5 in.-lbs.

IMPORTANT: Use the tightening sequence indicated in the figure on page 4.

7 Torque the previously loosen brandbar screws to 5 in.-lbs.

8 The gasket that goes around the glass may protrude from the front of the Virtuo in some places. Using a sharp knife, trim the gasket so it is flush with the glass.

9 Reconnect all connectors removed from the bottom of the monitor in step of the Removal procedure. The bottom of the new monitor is labeled as shown in the following figure.



New monitor label

10 Reconnect the AC power cord and power on Virtuo.

11 Verify that Virtuo boots successfully to the customer interface.

12 Test the functionality of the monitor using the 5 buttons located on its back panel.

Button	Control	Function
1	ENTER	Selects the current choice in the on-screen display (OSD).
2	UP	Increases brightness. While viewing OSD: - Selects OSD choice counterclockwise. - Increases the value of OSD adjustment choice.
3	POWER	Turns the monitor ON/OFF.
4	DOWN	Decreases brightness. While viewing OSD: - Selects OSD choice clockwise. - Decreases the value of OSD adjustment choice.
5	MENU	Displays/exits the OSD menus.

NOTE	After replacing the monitor, the camera will require re-calibration. Refer to the *PhotoBooth Camera Bracket Installation and Alignment* (P/N 900523-001) for instructions.

13 When replacing the touch screen a calibration is required. If not calibrated, it may appear that the monitor has no touch.

14. To start the calibration press and hold the manager button on th I/O board for more than 5 sec.

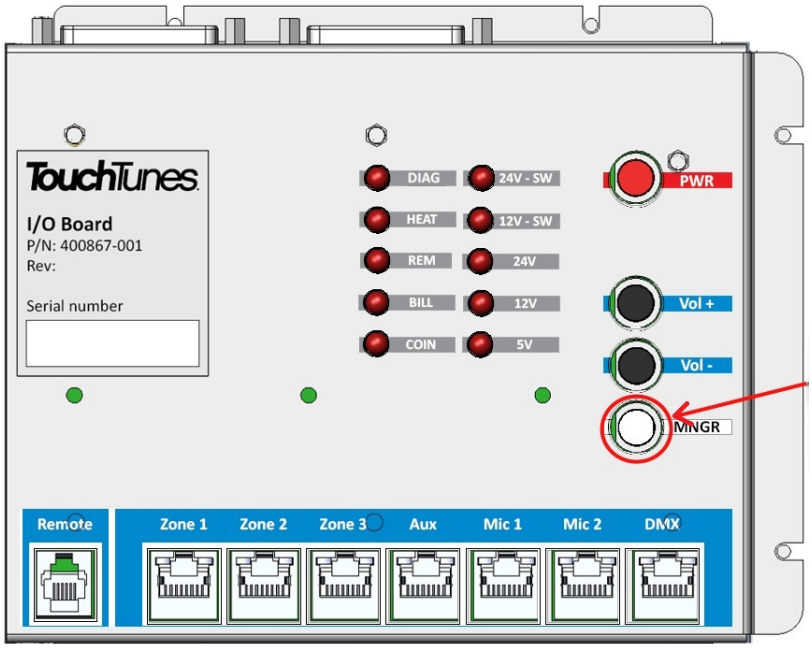
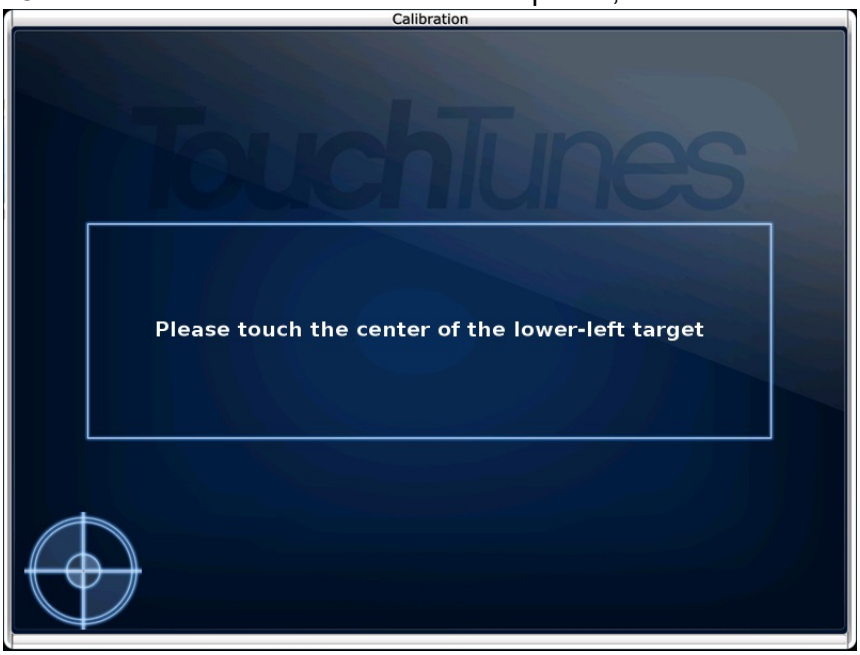


Figure 1: Manager Button

15. Once the software initialization has completed, follow the on screen steps for the calibration.



You have completed replacement of the Virtuo monitor.

Note: The above image shows the LED touch indicator seen on other versions of Virtuo monitors. PCAP monitor 300955-003 does not have this feature.

Contacting Technical Support

If you need help or have questions about this guide, call the TouchTunes 24/7 Service Hotline at 888-338-5853.

To help us assist you more effectively with problem reports, the following information may be required when contacting TouchTunes support:

- Jukebox model and ID
- Operator ID
- Serial number of the component you believe to be defective
- Date/time of the problem
- Actions performed immediately before the problem occurred
- Any additional comments relevant to the problem

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